Manual on strategies and actions to mitigate climate change
from knowledge ... 

... to action
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Introduction

Local groups and regions have a leading role to play in facing climate challenges. They possess not only a thorough knowledge of local conditions, resources, and needs, but also know the expectations of citizens. They assign public financing; they complete projects with long term effects on key sectors (energy production, transport, waste management). This way, they contribute towards shaping tomorrow’s territories. They provide the necessary impetus for undertaking action. They prove that effective action is possible. Climate action is also an opportunity to strengthen local democracy by intensifying debates for negotiating changes that will have major impact on territories and on lifestyles.

To conceive and create conditions for a sustainable future, the following are mobilising their efforts within the framework of the Climact Regions project: ARE Liguria (IT), the Kent County (UK), the County of Maramures (RO), Mediterranean Center for Environmental Studies - CEAM (ES), NENET, the Regional Energy Agency of Norrbotten (SE), the Regional Council Nord-Pas-de-Calais (FR), Rhônalpénérige-Environnement (FR), the Regional Council of Rhône-Alpes (FR), the Senate of Berlin (DE), the Energy Agency of Zlin (CZ) and FEDARENE - European Federation of Agencies and Regions for Energy and Environment (BE).

Priority is given to three areas of work:

• **Observation** and monitoring of greenhouse gas emissions (GHGs);

• **Development of regional strategies and activities** with a view to mitigating climate change;

• Implementation of a strong **governance** process.

For each of these areas, the project’s aim is to develop the learning process through the exchange of experiences and good practices put in place within the partnership and beyond.

The purpose of this guide is to make **general recommendations** on defining strategies for mitigating climate change and undertake actions based on 130 practices from 20 countries identified in the Climact Regions project. These practices were selected based on 7 criteria (as they relate to their links to the regional level, effective contribution to the fight against climate change, contributions to sustainable development, attainment of tangible results, their innovative character, the cost-effective ratio & financial viability, innovation, & ambition).

We therefore hope to inspire regions to put in place appropriate and effective strategies for undertaking ambitious action against climate change.

Kent County Council has been utilising the best practice identified in this guide to develop a Renewable Energy Action Plan for Kent. Examples of how this has been achieved to date are given where relevant. The action plan remains in development and this guide will be updated to reflect learning throughout the ClimactRegions project.

This methodological guide was prepared by the French consulting firm, Energies Demain, with significant contributions from partners involved in the Climact Regions project.
Respecting methodological steps for successful climate action

Governance

Initiation phase

What is the basis for action?
Define and put in place an adapted management framework
Engage key players

Development phase

Establish and share the diagnostics
Carry out strategic choices
Develop an action plan
Make adequate financial arrangements
Approve the action plan

Implementation phase

The management team’s central role
Points of vigilance

Evaluation - Resource Allocation

Communication - Reinforcement of capabilities

Figure 1: Methodological steps for successful climate action
Initiation phase

The initiation phase will set the course to be followed for defining and successfully implementing the strategy and action plan.

Defining and implementing an adapted management approach

The management structure is a key element for the organisation initiating the strategy or action.

► A project management team: consolidate skills, expertise, and experience

• Composition

A management team should be formed and a contact person should be designated to ensure that sufficient time is devoted to ensure the visibility of the project, internally and externally. The team can combine a range of skills, expertise and experiences according to strategy or action plan perimeters, and can be adjusted on an ad hoc basis throughout the process. This may be an opportunity to promote knowledge sharing and skills transfer. For the sake of effectiveness, there must be a restricted management team to which people may be added from time to time, depending on the specific experience required. Regional environmental agencies or energy agencies may be involved, if necessary.

The above steps will identify challenges, priority areas, and opportunities for action. A first working paper can be written to design a "road map" based on the documented reasons for action which will prove to be valuable when management awards the development process, if it is limited to internal work or carried out by external stakeholders. This project may be modified during its development. Early on, such a roadmap will guide thinking towards operational aspects.

• Definition of tasks to be performed

The project management team may be responsible for the following tasks:
• Development of the methodology, strategy, and action plan, including definition of key steps and items to be produced;
• Internal consultation with departments and with external departments with teams and project stakeholders;
• Analysis of the present regional situation on climate change (or the management team in charge of this task);
• Preparation, coordination, and meeting reports;
• Bringing in technical expertise on achieved results and ensuring that items and information are produced;
• Regular reports on progress (meeting deadlines, budget matters, and pre-defined objectives), identifying potential impediments to the steering group (or officers), and suggesting solutions to be implemented;
• Organisation of corporate communications (addressed to decision makers) and communication to the general public.

Kent County Council has developed a project team for the development of a Renewable Energy Action Plan. This management team has been developed to provide the best support for the project overall, mixing strategic level support and technical expertise. The project executive and wider team members hold posts on other supporting groups and mechanisms ensuring
that the project is widely disseminated and decisions are made at the appropriate level.

The Rhône-Alpes Region is implementing development policies of low energy buildings through various actions (requests for proposals, grants etc.). As part of the promotion of low energy buildings, the Rhône-Alpes has set up the “Contest today Energies” held every two years. This regional competition recognizes buildings (private, public housing) saving energy and territorial approaches of sustainable development. A brochure highlights the winners in order to raise the general public’s awareness and as well to highlight local development policies. Read the best practice in appendix 1

• Delivery of interim and final documents for decision-making and communication.

For delivery of the renewable energy action plan, expert input was gathered through the commissioning of a renewable energy resource and opportunities study for Kent, undertaken by Aecom. The study is available on the Kent County Council website and analyses the present situation with regards to renewable energy in Kent. The study has provided Kent partners with the evidence base for informed decision making. In addition a shorter version has also been produced for communication across Kent partners and residents, available on the County Council website.

As part of the “Berlin impulse” (DE) project, the project management teams are composed of members of the Berlin Senate. The program is managed by the regional energy agency (Berliner Energieagentur). The energy agency proposes plans, implements them, and annually submits two reports to the Senate. The Senate makes all decisions regarding the project in agreement with the energy agency. Read the best practice in appendix 1

Tasks must be correctly specified to clarify areas of responsibility and facilitate good governance. To correctly ensure its missions, the management team must have access to sufficient resources (time, information etc.) and must be supported at the executive level.

Within the framework of the European Energy Award project (European prize for energy) in Liguria, each municipality sets up “an Energy Team” to support the process composed of members of local government, specialised technical services in various sectors such as waste management, water treatment, mobility, estimating, and members of City Council (usually the Mayor and a Councillor in charge of the Energy Sector). External technical assistance for the Energy prize is provided. Stakeholders are also encouraged to participate in the team. A key success factor identified by the Liguria region was the need to make every effort to involve the representatives of different sectors of the municipality, including members of the local political party. Read the best practice in appendix 1
**Steering Committee**

The steering committee completes the management committee which provides strong leadership for the project. There is no unique configuration of the project steering group. The function of this group is to lead the project and to ensure that it has political support.

For example, its tasks would be:

- To clarify the objectives and the basis for action and ensure consistency with regional priorities;
- To control the project’s management and its progress;
- To promote the participation of key stakeholders;
- To ensure that sufficient resources are made available to the project management team so it can carry out its functions;
- To make decisions based on the suggestions of the project management team about policy choices for resource allocation;
- To communicate with other institutions to defuse potential opposition, foster support (financial or administrative) and to prepare for adopting the strategy or action.
- To ensure accountability for the entire process and for the results achieved.

The steering committee could include key executive members, elected officials, and stakeholders who are the central figures for the project’s success. The project can also be supported by a recognised personality, who can give more visibility to the project and facilitate its success. This person must be a legally legitimate person, having distinguished himself by his charisma, influence, authority, political role, and his experience in shaping environmental policies.

**Ensure political support**

Strong political support at both national and local levels is a key criterion for the strategy’s success.

Political support can be facilitated by the following:

- Ensuring awareness of issues and seeing to it that everyone has the minimum background information;
- Presenting the basis for action (inclusion of the legal obligation and regulatory framework) and the main aspects of the project;
- Putting forward the main challenges (for example: high initial investment cost) and success factors (for example: social demands for implementation of a project / measure);
- Detailing the challenges and opportunities in different areas of intervention (economy, urban planning, social policy etc.);
- Citing the relevance of the action in terms of national objectives or level of ambition, if the action is implemented at the region’s initiative;
- Showing that the population is ready for this type of action.

*In Jokkmokk municipality, Sweden, the board of the municipal council is the steering committee for the local climate strategy and energy plan. In addition Jokkmokk decided to sign the EU Covenant of Mayors and is obliged to develop a Climate Protection Strategy. The strategy has been agreed concordantly by the City Council in February 2010. Basis for this strong political*
commitment were:

• Comprehensive awareness raising activities within a project specifically designed for that
• Presenting legal obligation to decision makers
• Linking the climate strategy to already agreed strategies for local development. Read the best practice in appendix 1

Communication with the political level can be achieved through:

• The regular presentation of information points at regular meetings ;
• Specific sessions (based on the participation of high level experts).

In Kent, political support for the development of the Renewable Energy Action Plan has been gathered through a number of mechanisms. In 2010, the Kent County Council scrutiny process resulted in the Renewable Energy Select Committee convening to listen to evidence and develop recommendations for action in Kent. Their report and recommendations are available on the website. A key recommendation of the select committee was the development of a co-ordinated approach to renewable energy deployment in Kent.

Political support continues to be gathered through the select committee, but in addition to this the Kent Environment Champions Group also provides governance. The Champions Group consists of lead Members from across Kent who drive activity on the Kent Environment Strategy. Elected Member training on the use of renewable energy has also been developed to coincide with the development of the action plan to further build the 'champion' role.

Updates on the development of the plan are also carried out for Kent County Council members through Policy Overview and Select Committee updates at key decision points in the process. For further information please refer to the Governance Manual for Kent.

Rallying around the action

Once the organisation dedicated to managing the process is well defined and set up, the commitment of stakeholders may, in general, be undertaken to jointly build the strategy and prepare for its future implementation. The governance manual (also published as part of the ClimactRegions project) provides a new analysis and recommendations on the management of stakeholders.

Identifying the stakeholders

The response would strongly depend on the perimeters and target sectors of the action plan and strategy. Stakeholders can support the project, providing added value or who will be affected by the project’s implementation. They may include: banks, private sector representatives (industry federations etc.), public authorities, research organisations, associations, and representatives of the general public.

Identifying stakeholders and their analysis should provide information on their areas if competence and intervention, their motivations, and their areas of interest for participating in the project, the resources (if they are financial resources, expertise, or their ability to influence any sector, including
specific groups, etc.). Some key stakeholders (for ex.: organisations that will be seriously affected) can be consulted by the project management team at this stage on the overall approach in order to assess its viability and to measure its acceptability.

Their very early integration into the project will promote understanding of problems as well as its acceptance, and support of the process. Successful commitment of stakeholders requires a long-term process, establishing work habits and mutual understanding. To some degree, it often depends on informal relationships or widely existing cooperation, if necessary.

At this stage, it is also important to gather practical information on the various stakeholders who should be involved (key contacts and contact details to facilitate communication).

► Identifying contributions

The level and details of their commitment should be defined. In particular, this involves:

• **Level of openness.** Many participants may require more time and it may not be appropriate for them to provide ideas in detail. Information, knowledge sharing, and brainstorming are generally the main objectives of a general consultation. A limited area may be appropriate if the objective is an operational definition of the action plan. A mixture of both is possible, and in particular, allows sufficient time when working with stakeholders. Beyond what stakeholders’ contributions (input information) may bring to the table, creating a highly dynamic degree of commitment to a project can be important as it will facilitate the implementation of effective actions. Indeed, many sociological and psychological studies have shown that the committing party in a demanding activity must feel that others are also committed (“I do, if you do, if we all do”) and must have significant impact.

• **Level of involvement of stakeholders.** It is important to clarify how stakeholders will be involved in the process if this process is limited to consultations on a predefined project and a general brainstorming, or on joint development of the strategy and action plan, etc.. Several “circles” of integration can be defined and key stakeholders and those related to the project may go beyond the involvement of stakeholders from a larger perspective.

• **Expected outcomes.** What do we hope to achieve at the end of the process? - To ensure the effectiveness of the consultation process and an understanding of its objectives, the project management team should determine the specific “items to provide” and clearly define outcomes.

• **Method of participation.** Stakeholders should have a clear idea of how they will be involved and be aware of the work processes. This means that the number of meetings must be specified, the place, agenda and dates - so they can plan and devote their time to the work.

The number of consultations should be minimised and be sufficiently spread out in time.
Development phase

The development phase refers to the methodology, tools, and mechanisms that can be used to build a strategy or to take effective action. The main difficulty here is to successfully move from an established diagnostic phase towards a strategy, and towards concrete actions in line with the strategy. Each of these elements must be consolidated to form a logical whole.

![Figure 2: A strict correlation between the diagnostics and action](image)

Sharing the territory’s diagnostics

The analysis of the regional situation must be presented, explained, discussed, in order to refine it and solicit support for the preliminary findings. It thus provides the starting material for the debate and later will verify the suitability of proposals against questions and challenges.

It is therefore necessary to present to the various stakeholders (executives, elected councillors and beyond) the results of the diagnostics and the regulatory framework of reference. Information sharing and the ability to share items that emerge from the territory’s diagnostics constitute the basis for establishing a strategy. It is necessary to establish, from the start, a uniform information base among the stakeholders.
Information can be presented in different ways: organising seminars, creating specific web pages on the region’s website, etc. It is preferable to choose those communication methods that would generate interaction. Their specific expertise or their practical knowledge would then allow participants to provide additional information and enrich the initial diagnostics.

► **What needs must be fulfilled?**

The starting point of the whole process is the clear identification of needs and issues that the strategy must address.

Action can be initiated to respond to legal requirements or to be implemented by the region on its own initiative. Given that it often rests on a limited number of key players, it is important to know what their interests are, motivations, objectives sought, their links with the political agenda. A clear identification of those who rolled out the process will influence the level of ambition and the governance structure.

► **What is the starting point?**

It is necessary to clarify the local and national context. This gives a vision of the context from which action can be taken. This fixes the action in relation to the national context, to compare it against similar actions, and to assess its level of ambition. Clarification of the legal context may also help identify not only leverage actions but also the barriers to action so that adequate resources can be put in place to address them.

For example, in the context of achieving the carbon-neutral capital goal by 2025, the city of Copenhagen identified national legislation as a barrier to the road tax it wanted to implement. It therefore filed a request to amend national law to allow the introduction of such a local tax.

*Read the best practice in annexe 1*

Preliminary studies and drawing up a list of questions that require further study may be required. This involves collecting information containing facts and figures to support the action, as well as the reasons for implementing the project. For example, this could cover:

- The **regional situation** in terms of energy consumption, production of renewable energies, reduction in greenhouse gas emissions related to community activities and various sectors.

*In Rhone-Alpes, these data are available from the OREGES, Regional Observatory for Energy and greenhouse gas emissions, which provides communities’ profiles territorial energy and climate with the consumption data energy and GHG emissions by sector and number of installations of renewable energy. Read the best practice in annexe 1*
In Kent, the renewable energy resource and opportunities study identified current energy use, carbon profiles and fuel poverty across the county. In addition to this a series of energy opportunity maps were produced to identify where the highest potential exists for renewable energy deployment in Kent. This information provides the evidence base for the development of the action plan.

- The challenges, priority areas and opportunities for improving mitigation of climate change;
- The initiatives undertaken so far in the chosen areas for action not only by the region but also by local authorities and stakeholders;
- The resources and barriers (e.g. level of social acceptance, interest and motivation of stakeholders, information needs, etc).

What objectives are to be achieved?

A rigorous evaluation of the regional situation will help determine ambitious but achievable objectives in order to maintain an “ambitious” attitude on climate action. That is:

- The objectives for GHG reduction in the medium and long term (division by 4 of emissions in developed countries before 2050 for a temperature increase below 2°C);
- Priority actions. Building scenarios can help identify those areas where action should be taken.

The energy policy programme framework for the region of Zlin (CZ) referred to as “the design” is based on a detailed description of the initial situation including data on air pollution, on energy consumption, and on the general description (demography, geography, climate, etc.) at the regional and municipal levels. Five potential scenarios were carried out corresponding to different levels of ambition and priorities for action. A set of recommendations was given to players working at the regional and municipal levels. Read the best practice in annexe 1.

Construction of scenarios and setting of goals to be achieved are technical and political exercises. Scenarios can help to “translate” the objectives into a comprehensive set of concrete measures (e.g., in terms of the number of buildings to be insulated, energy performance, modal change, tons of waste reduction). However, scenarios require defining targets and determining leverage actions that the region wishes to include in the strategy. In addition, it requires defining assumptions that are far from being neutral (economic growth, cost of energy forecast, etc). Solutions will not come from the construction scenario (of the building), but must be determined a priori.

In its carbon-neutral city strategy by 2025, the City of Copenhagen (DK) developed a long-term vision and a set of goals. A set of objectives was determined to set intermediate targets: a 20% reduction of greenhouse gas emissions by 2015 compared to 2005, and 85% clean urban vehicles by 2015. A long-term vision for the city was created including the various aspects of urban events. Copenhagen’s Eco-metropolis vision was unanimously decided by the municipal council in Copenhagen in November 2007.

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1 Scenarios are powerful tools for exploring situations. They define a set of actions that are compatible with general objectives (particularly the 20-20-20 objectives and the division by 4 of GHG emissions for developed countries before 2050), and they determine specific objectives.
The Vision has four central themes: to be the best city in the world in all cycles; to be the capital of climate change mitigation, to be a green and blue capital, to be a clean and healthy city. A green growth strategy was also established for the city.

Read the best practice in annexe 1

It is therefore important to predict potential future events to define:

- Constraints such as rising energy costs and the level of reduction of GHG emissions to prevent any negative impact and unexpected additional costs.

  For example, the region of Styria in Austria built a scenario with reference objectives of a 30% reduction in GHG emissions by 2020 to identify possible new actions if EU targets are to be modified, and would go from -20% to -30%.

  Read the best practice in annexe 1

- Legislative changes planned.

- Level of ambition: sometimes a high level of ambition that is not achievable can be researched on knowing that a fixed objective is to be achieved.

  The “Target 2050: countdown to a low carbon future” of Gloucestershire (GB) is voluntarily based on an objective of reducing GHG emissions by 60%. A preliminary study states that this target is unrealistic, given the high cost of investment required (estimated at €30,000 per household). The program was nevertheless established, with this final ambitious goal.

  Read the best practice in annexe 1

- It is necessary to have an ambition that goes beyond the goal of reducing emissions and which targets overall objectives of sustainable development (precarious energy consumption, job creation, fuel, and creating jobs (work), etc.) that should be incorporated to stimulate interaction and hybridisation between policy areas.

  The “1 village - 1 MW” project (HU) promotes the use of local renewable resources (biomass, wind, solar energy, the heat from old mines) to ensure self-sufficiency in energy production and development of intelligent networks. It provides low skilled jobs in the field of transport, waste sorting centre, biomass production, maintenance of power plants, buildings, and operation of production facilities for renewable energy. Read the best practice in annexe 1
Growing the Garden of England: A strategy for environment and economy in Kent identifies a series of priorities for the county, which have far-reaching effects to help deliver wider social and economic, as well as environmental, aims. There are three themes and ten priorities, each with a 20-year vision and high-level targets.

1. Living ‘well’ within our environmental limits leads Kent towards consuming resources more efficiently and maximising opportunities from the green economy.

2. Rising to the climate change challenge works towards a low carbon Kent, maximising renewable energy opportunities and prepared for and resilient to the impacts of climate change.

3. Valuing our natural, historical and living environment optimises the real economic and social benefits of high environmental quality.

Carrying out strategic choices

Putting in place a strategy implies focusing on areas of intervention in relation to others, and to reduce the number of intervention sectors. These choices should be explained and encourage membership, as well as a debate to be understood, and shared if possible. An official launch of the consultation will give impetus to the project. The goal can be to present the reasoning behind the action, the objectives, and details regarding the organisation of the consultation process, the identification of potential benefits to stakeholders, and steering the project. Stakeholders will become involved in working sessions if they feel that the project measures up to the regional agenda and that their contributions can have value.

► Consultation

Among the practices studied, two forms of consultation were identified:

- Public consultation - a well-defined project is submitted for comment. The purpose is to primarily inform the public (who may be affected by the implementation of the strategy or by potential actions) and to build membership. This approach therefore focuses on a debate (those who agree and those who don’t), depending on whether amendments are possible or not.

- Collaborative work, often in the form of working groups - this approach can aspire to go beyond the collection of opinions and involve stakeholders in building the strategy and action plan by providing ideas, expertise relating to feasibility, and the opportunity to implement given measures, etc..

For example, as part of its Climate Change Mitigation Strategy aimed at achieving national and regional emissions reduction targets, the city of London (GB) obtained the participation of a wide range of internal stakeholders and citizens. The strategy was based on an extensive consultation process (online consultation), and the details were developed through an iterative process involving internal experts and councillors. Read the best practice in annexe 1.

It is important to focus the questions on specific aspects, corresponding to the expected potential contributions of stakeholders.
In any case, participation processes have limitations, due to the fact that policy makers must make choices with respect to different contributions, and establish priorities that will not satisfy all contributors. It is important that they know that their proposals were considered, that they understand the reasons for the choice and that they are substantiated by the diagnostics and the specific reasons (cost, acceptability, social equity, economic development, legal obligations).

_validating strategic choices_

The strategy on which the action plan rests must be approved and shared. The final document will be submitted for approval to the appropriate committees. It may include the following:

- Basis for action: regional situation with respect to climate change and energy;
- Analysis of strengths, weaknesses, opportunities and trends: for the region, but also for long-term commitments and objectives (national objectives, voluntary commitments);
- Priorities and an indication of how they meet these challenges;
- Proposed financial breakdown between strategic priorities.

Approving a strategy can be a challenge, so it is necessary not to overlook its importance. Indeed, often the local players already have a series of actions they wish to fund. It means avoiding the temptation to return to the list without any reflection / connection with the territory’s diagnostics. These actions can be discussed later, they will have better acceptance if they correspond closely to the strategy.

- Commitments to GHG reduction energy goals;
- Changes in most policy areas challenge well-established practices;
- Substantial funding guaranteed over several years.

Specific arguments should be prepared for policy makers to link the content of the strategy with the political agenda and to present a financial plan taking into account the potential returns on investment and savings.

**Developing the action plan**

This step is to specify actions to ensure their feasibility and relevance, and to provide sufficient information for decision making:

- Objectives and basis for action;
- Short description;
- Person / organisation responsible for implementation;
- Target group(s);
- Principal implementation stages;
- Duration;
- Resources required: financial costs, personnel (full time equivalent);
- Financial means.
This step mobilises time and requires a considerable amount of coordination. A regular review of the action plan by the management team with executives will be necessary to ensure that the work is properly carried out.

**Maramures** County Council developed its first Regional Energy Action Plan as a result of the activities carried out within the MORE4NRG project, starting with the state of the art seminars when the energy policy concept was presented along with a description of the development and implementation process, the peer reviews, the one in Maramures being focused on energy policy development, when experts among the MORE4NRG partners analysed the energy landscape of the host region and generated a set of recommendations compiled in a comprehensive peer review report and ending with the preparation of an Maramures Energy Action Plan. Read the best practice in annexe 1

An action plan may consist of several types of measures:
- Structural Measures: insulation plans for buildings, development of public transport modes, etc.;
- Supporting Measures: subsidies, studies, creating a support structure such as an energy agency, etc.;
- Awareness Behavioural Change Measures: education, training, etc..

An example of strategy for the realization of an effective Action Plan is the SEAP of Genoa. The City of Genoa is the first in Europe to have submitted its Action Plan in accordance with the Covenant of Mayors and its SEAP has been recommended by the Commission as an ambitious and comprehensive plan in which plans and programmes in other relevant areas have been integrated.

The general approach (political commitment, adaptation the of city structure, gaining support from the stakeholders) is addressed properly and the plan provides an effective monitoring and management strategy that assesses priorities and indicates how to meet challenges. Read the best practice in annexe 1

To become the first carbon neutral capital by 2025, the city of Copenhagen (DK) developed an action plan in the following areas:
- Integration of mitigation strategies for climate change in energy supply methods:
  - Replacement of fossil fuels with biomass in a power plant, and wind installations.
- Urban mobility:
  - Encouraging the use of bikes, and improving public transport.
  - Construction of infrastructure for electric and hydrogen vehicles.
  - Development of a transportation plan for all jurisdictions. Low-consumption vehicles for city services.
- Initiatives for buildings:
  - Energy efficiency in the construction, renovation, and establishment of a fund for energy conservation, training offer on reducing CO2 emissions. Reducing electricity consumption in the context of urban lighting.
**Initiatives for the people of Copenhagen:**

- Development of partnerships and innovative think-tanks. Training for municipal employees. Improving energy efficiency in municipal actions.
- **Climate change in urban development initiatives:** Sustainability planning for urban development projects.
- **Adaptation to climate change:** Local drainage of rainwater. Additional green areas.
- **Horizontal initiatives:** Communication, partnership development. Read the best practice in annexe 1.

The definition level of actions and their suitability for implementation may also vary, because it depends on preparatory measures or on similar measures in a previous phase, on the level of consensus reached with the relevant stakeholders and among members of the regional council, on the project’s feasibility, and on the availability of resources, prior to its implementation.

For the implementation of the Action Plan, various tools and mechanisms can be used, including:

- Recourse to sovereign powers: regulations, levies, taxes etc.

Since 2006, Kent County Council has worked with the Carbon Trust and Salix Finance to develop an Energy and Water Investment Fund (EWIF) to make energy and water improvements across its estate and over £1.7 million has been invested so far. The fund provides interest free loans and, in some cases, grants and improvements have included low energy and LED lighting, rainwater harvesting, and ICT projects. £500,000 of grant funding has been used for renewable energy and water efficiency work in schools, including the installation of three biomass boilers.

**The city of Barcelona (ES)** issued its Solar Thermal Ordinance (OST) in order to present solar thermal solar systems in the city. This order is intended to regulate solar thermal energy and its use for heating water production in the city’s buildings. The ordinance also applies to new, restored and completely refurbished buildings and for which a change in use was sought. These provisions apply to residential buildings, health centres, sporting facilities, commercial and industrial buildings, and any activity involving kitchens, laundry facilities, or other activities involving a large consumption of hot water, regardless of whether they’re public or private buildings. Read the best practice in annexe 1.

Other tools will be detailed in the following paragraph and relate to financial and contractual arrangements.
Establishing a suitable financial arrangement

Funding and human resources should be allocated to each measure and to players responsible for implementing identified tasks to ensure that the action is well defined and ready. This information will validate the action plan at the level of the Steering Committee.

Financial arrangements are particularly important as they are most often the main obstacles to adopting and implementing measures. Presenting a sound financial plan will be a central element in negotiating the adoption of the action plan. Therefore, sufficient time should be provided to identify funding sources at the national, European, or international levels. Many of the practices identified in the ClimactRegions project were funded by the EU (Structural Funds, Intelligent Energy for Europe, etc.).

The ability to optimise the use of funds: identifying and attracting funding and implementing adequate financial packages is a key element.

European regions have national funds. EU funds are also available. Some funds have a general goal and may fund energy / climate projects as soon as these projects meet the overall objective of this fund; e.g. regional development, rural development, training activities. They include the European Regional Development Fund (ERDF), European Agricultural Fund for Rural Development (EAFRD), European Social Fund (ESF). For the 2014-2020 programming period, the draft ERDF regulation provides for a minimum threshold for projects related to energy efficiency and renewable energy1.

Additional funding is directly targeted on this theme.

The Intelligent Energy Europe (IEE) fund has a total budget of 730 million Euros for 2007-2013. This fund is managed by the Executive Agency for Competitiveness and Innovation (EACI).

ELENA (European Local ENergy Assistance) is a technical assistance facility established by the European Commission and the European Investment Bank in order to facilitate the mobilisation of funds for investments in sustainable energy at local level. ELENA support covers a share of the cost for technical support that is necessary to prepare, implement and finance the investment programme (such as feasibility and market studies, structuring of programmes, business plans, energy audits, preparation for tendering procedures).

Two publications of the European Commission review funding of the European Commission or the EIB, which cities can tap2.

The Covenant of Mayors Office, supported by the European Commission, has published the Thematic leaflet n°3 : “Inspirational Financing Schemes : Food for Thought for Covenant Signatories”. This Leaflet seeks to provide an overview of the different funding opportunities available to Covenant Signatories at the local, regional, national and European level3.

The EIB (European Investment Bank) provides loans, while the Risk Sharing Finance Facility (RSFF) has a budget of 2 billion Euros and is for private and public organisations. The Marguerite Fund, the target amount planned for 31.12.2011 is 1.5 billion Euros and is for infrastructure financing.

The following financial packages have identified resources adapted to numerous regions and cities.

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• **Public-private partnerships (PPP):** this type of arrangement brings together private companies and government agencies on common goals. They allow for continuity of action because they provide long term technical and financial support. Based on the laws of the country concerned, the public-private partnership can take different forms.

Within the framework of the Ile-de-France Energies Nouvelles (IDF-EN) project, the **region of Ile-de-France (FR)** has created a mixed economy company (MEC), a public-private structure. The creation of the regional energy operator will meet the high expectations of local Ile-de-France groups on two major issues: initiate thermal renovation of buildings that are presently neglected, especially condominiums, public sector buildings, and small social housing landlords; support the development of renewable energies in the territory. An initial budget of 15 million Euros was voted by the region and will be supplemented by contributions from other communities and partners. The MEC is reimbursed by funds generated through the sale of green electricity and energy savings. The structure is composed of Ile of France, an institutional bank, local groups, specialised agencies in the field of energy, insurance companies, and a technical expert. *Read the best practice in annexe 1*.

• The establishment of partnerships and agreements with the banking sector may also involve financial mechanisms such as **zero interest loans** or mechanisms to cover the risks associated with an operation.

The **Nord-Pas-de-Calais region (FR)** has set up the ISOLTO loan, in considering that the insulation of buildings is not a priority for owners and that subsidies are not sufficient to sustain the level of ambition desired by the region. Government agencies have joined forces with banks and private investors to achieve sufficient leverage, by providing interest-free loans. *Read the best practice in annexe 1*.

The conclusion of an **energy performance contract** can be very effective in achieving significant energy savings in the construction sector and its low-price rehabilitation for the community. However, this may require adaptation of the rules and procedures, and legal expertise, given the complexity of the contracts for this type of action.

The **Energy Saving Partnership, in Berlin**, constitutes a successful model for Energy Performance Contracting (EPC) and has helped significantly reduce GHG emissions and energy costs in Berlin’s public buildings: a private specialised energy service company brings its know-how and financial means into the project, ensures that adequate investments are made in the buildings and guarantees energy savings for a contractually agreed term. Its investment is re-financed through the saved energy costs, which are shared between both partners. So far, 25 partnerships comprising more than 500 properties (1,300 public
buildings) have resulted in a total net investment of €51.6m and guaranteed savings of €11.66m (i.e. an average reduction in energy costs of about 26%). Read the best practice in appendix 1

The city of Dormagen (DE) set up this type of action in the field of urban lighting. A survey showed that about 30% of the energy could be saved through modernisation and optimisation of urban lighting. The municipality's financial resources, being limited, the possibility of setting up a public-private partnership (PPP) was studied and its feasibility verified. The PPP model chosen was an energy performance contract of more than 5 years. An agreement was signed with a private energy services company. The company will recommend a series of improvements that can be paid for by energy savings. Public investments would not be necessary. If the savings do not match the guaranteed amount, the company pays the difference. Control of energy consumption is settled according to the contract and carried out by the energy services company. This experiment was successful because the contract objectives were met (energy savings went up to 44%). Read the best practice in appendix 1

• Introduction of a carbon fund: such a fund may be established to carry out energy saving measures in public buildings, for example. Private organisations can sustain this fund by putting in place a compensation scheme. The benefits generated by the sale of electricity or energy savings can also contribute to sustaining the fund.

Investments in projects with short-term repayments can finance additional measures with funds generated by energy savings (units of energy production of renewable energies, street lighting, etc). The region of Valencia (ES) implemented an improvement programme for energy consumption by traffic lights. This action covers all municipalities, of which the management of traffic lights is part of these skills. The regional authority has acquired LED bulbs and their installation was funded by the municipalities. This helped generate savings and lower operational costs, despite a significant initial investment. Return on investment is estimated at 3 years. Read the best practice in annexe 1

Identifying expected outcomes can help to strengthen the acceptance of the project or programme, as well as its social acceptance.

 approve the action plan

The action plan as it is proposed must take the following principles into account:

• Ambition: particularly in achieving European 3X20 objectives, constituting a reference for local action. Cities and regions (like territorial coordinators) that increase the level of ambition, can commit to going beyond these objectives, for example, by signing the Covenant of Mayors, the European movement that brings together more than 3300 signatories.

• Coherence: between strategic directions, implementation measures, and available resources.
Implementation phase

The management team plays an important role in organising and monitoring the implementation phase, particularly in defining how services will be used for implementing the actions that match their area of intervention. A clear definition of roles and responsibilities is essential. Special vigilance must be carried out on some issues.

Essential role of the management team

The management team can lead the operational coordination of the implementation of the strategy, given its knowledge of the project, its objectives, and its context. It is also important that it provides some continuity - a project “memory.”

Its role can cover the following tasks:

- **Concerted efforts** with those responsible for implementing the action plan and related organisations that can facilitate the plan’s implementation;
- The identification of potential **technical barriers**, administrative matters, or organisational difficulties;
- **Control** and regular **reports** on progress submitted to the steering committee;
- The **evaluation** of the strategy and implementation;
- **Communication** initiatives put in place;
- **Suggestions** for solving problems, methods and procedures for reviewing or updating the action plan and strategy.

Points requiring vigilance

Some steps require special attention because of their **technical complexity** or the **administrative procedures** that take time such as obtaining a permit, conducting environmental studies, doing technical and financial feasibility studies, and seeking additional expertise.

Ensuring access to **financial resources** in the implementation phase is important because the budget is agreed upon annually, in principle, and priorities can change over time. A mastery of financial mechanisms and monitoring of funds is required.

The relationship with **partners** and other links established during the development process is important for maintaining the dynamics, promoting synergies between players, and engaging joint action.

**Political support** is also a resource for implementation. Regular communication about progress will help to raise visibility of the Region’s action in the field, and create an environment conducive to taking initiatives.
Role of continuous improvement processes

The territorial observation, monitoring and evaluation are related activities; they are fundamental and complementary to public policy especially for long-term strategies aimed at preserving the environment and promoting sustainable development. This is a set of help procedures in taking decisions and in mobilising stakeholders. The evaluation measures the effects generated by a public policy, while monitoring is intended to measure the progress of an action, project or programme. These two procedures, completed by territorial observation, together form a continuous improvement strategy, the goal of which is to better manage and direct public policies.

Continuous improvement framework

► Defining indicators

A set of indicators must be defined to ensure observation, monitoring and evaluation, these indicators will provide data suitable for operational monitoring and the basis for deeper analysis.

Indicators provide a simplified representation of the state of a complex system and should be easily understood. They must include the following characteristics:

• Specific: the indicator must have a well-defined goal and a specific meaning;

• Measurable: the indicator should be based on available information and on skills; the calculation methodology should be well known;

• Attainable: a realistic path for accomplishment should be defined and a consensus on the objectives should be guaranteed in advance with stakeholders;

• Reasonable: indicators should focus on important information which is determined by policy objectives and the context. In addition, they should be representative of various dimensions of the action;

• Time-bound: the period for measuring the indicator should be indicated.

The structure should choose a limited number of indicators to enable effective communication. This is important for the collection and analysis of information that may make use of time.

There are several possibilities for classifying indicators. One of the most commonly accepted ones is to distinguish four categories of indicators based on their use:

Observation
• Context indicators to measure the evolution of a territory.

Monitoring
• Performance indicators to measure the progress of an action plan (% of completed action, Euros spent, etc.).

Evaluation
• Outcome indicators to directly measure results: number of renovated homes, energy saved, awareness, activities carried out, etc.

• Impact indicators to indirectly measure the results and are deferred over time: level of CO2 emissions, number of jobs created, etc.
The continuous improvement framework evaluation must be based on a representative set of indicators for observing, monitoring, and evaluating the strategy and/or action plan.

Indicators are only tools that transform reality into numbers. In this sense they are highly restrictive and may not be sufficient to take into account all aspects of the policy being evaluated. There are other ways to collect qualitative data such as case studies or surveys that can complete an assessment.

Objectives of the evaluation

Evaluation can be done at some point during the implementation process: before the start of the action (ex ante evaluation), during the execution (mid-term evaluation) or following the completion of action (ex-post) to understand and measure the effects of a policy and to improve its implementation.

The objective of the evaluation

The evaluation may have different goals:

• To inform how policy was conducted and its achievements;

• To know the effectiveness of measures for achieving target objectives and measuring the effectiveness of resource allocation between areas of intervention;

• To prepare for decision-making by providing information to continue, stop, or change a policy;

• To draw lessons and motivate stakeholders.

These goals can be combined: the evaluation may be multidimensional. The objectives should be clearly identified because they will help define the expected results.

Level of evaluation

Evaluation can be performed at three different levels:

• The territory - these are the various challenges that the strategy should address. The evaluation will focus therefore on the general objectives (20-20-20 objectives) and on global indicators. The impact of a policy in an area; for example, in terms of job creation and improvement of social justice can also be integrated.

• Strategy - focuses on the progress and results achieved by implementing strategic directions. It is therefore focused on areas of expertise of the regional authority and on each sector’s performance. The indicators associated with this level may be, for example, the number of houses covered based on the insulation building programme, the modal shift towards clean transport facilities, etc. It can also include an evaluation of the defining process and strategic implementation (services, stakeholders involved, the quality of cooperation, etc.).

• Action - refers to the monitoring of progress achieved in the implementation of actions (results achieved) and the resources used. Operational and quantitative indicators are particularly used.
Key principles for evaluating a policy or action

A policy can be analysed using different registers as seen above. The following principles will help build a comprehensive evaluation framework:

- **Coherence** (in definition and implementation): are the objectives of the strategy consistent (especially with other policies)? Are the implementation means (legal, human, financial, etc.) appropriate?

- **Relevance**: are objectives consistent with the problematic issues that must be addressed?

- **Effectiveness**: were the objectives achieved? Were the results a direct consequence of the strategy / action implemented, or are they produced by other influences?

- **Effectiveness**: are the financial resources properly allocated and put into good use? Are the funds allocated to this action related to the results?

- **Performance**: what are the impact and outcomes of the policy? Are they positive?

Organising and formalising the evaluation

The evaluation framework may be decided at the policy level and implemented by the project management team or by the department responsible for the evaluation. Piloting the evaluation must be clear and transparent and should identify the roles and responsibilities of each stakeholder.

The format in which the evaluation is presented should be defined in advance to identify required information. It is important that the results - presented in a progress report, for example - are communicated to the steering committee and also to the relevant departments, to supervisory staff, and potentially to stakeholders.

Evaluation as a basis for continuing improvement

The evaluation can adapt and improve the action taken, because it helps measure the effects of climate strategy or the effects of actions, and bring added value to the implemented policy. However, the evaluation requires the creation of a positive environment focused on improvements.

Key success factors

Indicators are not sufficient to establish a structure for operational evaluation. Other factors are:

- Policies to **support the evaluation process** in the organisation and the necessary changes.

- A **positive attitude** vis-à-vis the evaluation: the evaluation is often seen as a way to control or interfere in the activities of other departments or to assess individual functions. The evaluation should serve as a help tool for decision-making focused on the project and carried out globally.

- The **independence and objectivity** of the evaluation methodology and evaluators. In this regard, the evaluation may be conducted or facilitated by an outside agency to facilitate its objectivity and acceptance while involving stakeholders in examining public policy.

Participatory evaluation for improving climate action

The evaluation must improve the climate strategy of the region and its action. It should therefore be an opportunity to identify success factors, difficulties in defining, or the implementation process to incorporate the feedback of beneficiaries and policy makers.
The evaluation can be extended to cover evaluation of the quality and effectiveness of stakeholders’ commitment, knowledge, or gaps in skills in the organisation, the relevance of the governance structure since these sociological factors and the specific context are important parts of policy development and implementation.

The evaluation becomes more transparent, allows for better acceptance by the public feeling the impact, and renders the policy being analysed more effective if the different players, partners, beneficiaries and technical managers are involved in the procedure. A participatory evaluation where stakeholders formulate an opinion evaluation and some recommendations with the help of an evaluation expert gives greater legitimacy to the improvement strategy and strengthens the governance of climate action.
Success factors

Additional horizontal elements should be considered to maximise the chances of success. These elements are:

• Effective governance and effective management of the project;
• Appropriate communication to the attention of target groups and between different project partners;
• Innovation.

These are already mentioned in the phases detailed in previous sections, the following only serve as additional information.

Governance

The governance structure associated with the project has multiple functions at different stages: definition, implementation, and evaluation. Governance processes are designed to provide support, expertise, and advocacy for the design and joint execution of environmental policies. They offer the possible involvement of a variety of players at different levels, and the opportunity to be involved in defining and implementing a collective project through an open process of interaction and cooperation.

The governance structure is composed of several groups of stakeholders who take a more or less active part in the strategy's definition and successful implementation.

• Officials and technicians of the local community;
• Key partners involved;
• Direct and indirect beneficiaries;
• The general public.

The project management team plays an important role in selecting who will be involved, and when and how they are involved in the process.

Communication

Communication may have several objectives to facilitate the entire process

• Foster political support, stakeholders and the public - in this respect, the communication should provide appropriate and clear information;
• Support the mobilisation of players - the communication should then highlight the benefits that each local player could have from actions and issues;
• Facilitate the implementation of projects while understanding the objectives being sought;
• Promote the strategy at local, national and international levels, and recognise actions taken in the region.
Communication is essential until the project ends and even after it is completed. The definition of effective communication is based on the following aspects:

- Well-identified target groups;
- Knowledge of the media and their audience;
- A clear message can be adapted to different target groups (the formulation, the level of detail, the arguments, etc.).

The objectives of the communication will also determine its scope.

> To implement its travel plans, Umea (SE), wanted to create an organisation to support its activities, encourage citizen commitment, and develop a positive attitude vis-à-vis sustainable travel. Methods were tested on target groups. Group activities and events were organised with a focus on games, competitions such as:
> - “Relating your most absurd car trip”
> - Set up competing teams for bicycle use. In each team, at least one person usually takes the car.

Other events were held featuring working groups, meetings to share experiences, international conferences and trade shows, etc. Read the best practice in annexe 1

The implementation of effective communication will therefore be based on established relationships with various organisations (the press, associations, business representatives, etc.). It may be useful for the communication strategy to be in the context of the overall communications strategy of the local community, in order to avoid redundant messages or potentially conflicting messages.

**Capacity building**

Defining a climate change strategy should be based on sound knowledge of all stakeholders to maximise the chances for success and duplication over time. So this would be an opportunity to disseminate knowledge to policy makers, employees of territorial groups, other stakeholders, and the general public, because the underlying mechanisms of climate change and energy planning requires technical knowledge in particular. This knowledge can be transmitted in several ways:

- Information seminars (to explain the causes and consequences of climate change, the regional situation, etc.) to provide facts and illustrations;
- Training sessions (especially for politicians and staff, but also for target groups);
- Dissemination of good practices and testimonials to identify examples of effective and ambitious actions implemented elsewhere.

Improving skills around this process will help improve confidence, participation, and potential for mobilisation.
Innovation

Innovation should generate public interest and help achieve higher standards. Climate action often encourages innovation around governance of the strategy, the content of actions (testing of new technologies to produce heat or electricity from renewable resources, etc.) or means of implementation (innovative financing mechanisms). Promoting innovation throughout the process can help mobilise the support of policy makers and stakeholders, building support for ambitious goals.

- Innovation can be put to work at different levels of the strategy’s implementation;
- Terms of involvement of public and private sectors;
- Involvement of the general public;
- Achieving ambitious goals.

Since 2006, the eco energy cluster in Rhône-Alpes has implemented the program “Eco-innovation energies.” This new mechanism, supported by the Regional Council, aims to assist technically and to financially support the implementation of 10 innovative projects in the energy efficient building sector. The target is the Rhône-Alpes companies who develop innovative solutions for the design, manufacture, delivery or distribution of products or services (while offset construction or renovation of building). The Eco Innov-energy was nominated in 2011 by the European Commission as part of the top 10 best practices to support SMEs. Read the best practice in annex 1.

Kent County Council are leading on an innovative new European-funded project Fusion. Fusion is an innovative new project looking at supporting small and medium sized businesses to develop new environmental technologies, goods and services, or become suppliers of services. The project will help both start up and existing companies assess potential and assist with the development of existing products, services and technologies as well as businesses cases and feasibility studies. In addition the project will link researchers, policy makers and SMEs to look at emerging future environmental opportunities, including the impacts of climate change, and how to develop their economic potential. The project is funded through the Interreg IVa 2 Seas programme.
Appendix 1
Summaries of the 22 best practices related to strategies and actions to mitigate climate change

1. Rhône-Alpes, Today’s Energies Award
2. Berlin, Impulse
3. Liguria, European Energy Award
4. Jokkmokk municipality, Sustainable Energy Action Plan (SEAP) and Climate Protection Strategy
5. Copenhagen, carbon neutral capitale by 2025
6. Rhone-Alpes, Regional Observatory for Energy OREGES
7. Framework programme of energy policy in Zlin
8. Minus 30% GHG by 2020 in Styria
9. Target 2050 in Gloucestershire
10. One village - 1 MW in Hungary
11. London, Developing and implementing a Climate Change Mitigation
12. MORE4NRG - Measuring regions’ progress in the field of renewable energy sources and energy efficiency
13. Genoa, SEAP
14. Solar Ordinance in Barcelona
15. Energies Nouvelles project in Ile-de-France
16. Isolto, zero rate loan in Nord-Pas-de-Calais
17. Berlin, Energy Performance Contracting (EPC)
18. Street Lighting in Dormagen
19. Carbon Funds in Eastleigh
20. Traffic Lights Programme in the Comunidad de Valencia
21. Mobility Plan in Umea
22. eco energy cluster in Rhône-Alpes
Appendix 2
Bibliographie

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Published in December 2011.
With the active participation of:

With the contribution of: Energie-Demain, Inforse.